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(71) Applicant : **DAICEL CHEM IND LTD**

(72) Inventor : **URANO KOHEI  
 ASE TOMONOBU**

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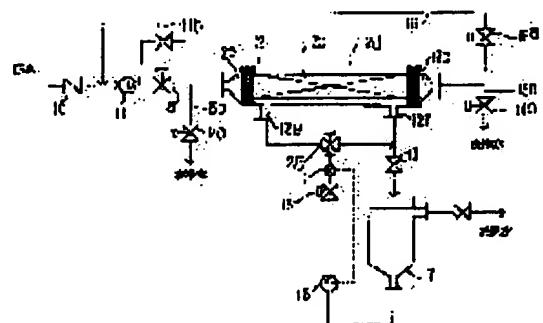
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## (54) METHOD AND APPARATUS FOR CLARIFYING SURFACE FLOWING WATER WITH MEMBRANE

### (57) Abstract:

PURPOSE: To rationalize the discharge of a suspended substance component at the time of backwashing, in a mechanism filtering surface flowing water using a hollow yarn ultrafiltration membrane module (UF module), by discharging washing water from a separate discharge route at a time of the backwashing of the UF module with transmitted water.

CONSTITUTION: Raw water from a river or the like is supplied to an UF module 12 while raised in pressure by a raw water supply pump 11 and, herein, the suspended substance component in the raw water is removed by the filtering action of an ultrafiltration membrane. Next, the transmitted water issued from the transmitted water outlets 12e, 12f of the UF module 12 is sent to a transmitted water tank 17 through a three-way transfer valve 12g and an automatic valve 13 to be once stored therein and subsequently discharged. In this filtering process, backwashing is performed for about 30-60 sec at every predetermined time (about 30min-1hr). That is, at first, the pump 11 is stopped and the automatic valve 13 is



closed and a pump 18 is driven to supply a part of the transmitted water in the tank 17 to the UF module 12 in a reverse direction to backwash the UF module and the released suspended substance component is discharged through an automatic discharge valve 14b.

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